

08-26-02

BOX-5800

PET



Patent No.: ACY33,377
Patent

DT03 Rec'd PCT/PTO 23 AUG 2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re of Application of: Metcalf, Thomas N. III et al.
Serial No.: 09/674,368 Group Art No.: TBD
Filed: April 29, 1999 Examiner: Christopher Low
For: VACCINES CONTAINING RECOMBINANT PILIN AGAINST
NEISSERIA GONORRHOEAE OR NEISSERIA MENINGITIDIS
Confirmation No.:
Customer Number: 25291

August 23, 2002

TRANSMITTAL LETTER

Examiner Christopher Low
U.S. Patent and Trademark Office
Box Sequence, P.O. Box 2327
Arlington, VA 22202

Dear Examiner Low:

As per the suggestion you made during our telephone conversation, attached herewith is a computer-readable copy and a paper copy of the sequence listing in the above-identified application together with a statement under 37 C.F.R. §§1.821-1.825 that the computer-readable version and the paper copy are the same. I have also attached herewith a copy of "Notification of Defective Response", and a copy of the letter that was sent to Mr. Robert Sparr, together with supporting documents indicating that the defective sequence listing resulted from the incompatibility of PatentIn, Version 2.0 with PatentIn, Version 3.0.

CERTIFICATE OF MAILING 37 CFR §1.10

I hereby certify that this paper and the documents referred to as enclosed therein are being deposited with the United States Postal Service on the date written below in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number ET937376770US addressed to the Commissioner for Patents, Washington, DC 20231.

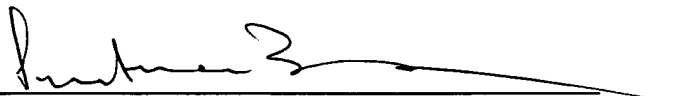
08/23/02
Date

Andy P. Iyer, Ph.D.


BEST AVAILABLE COPY

Should you need to get in touch with me or should you need any additional information, please do not hesitate to contact me at (845)-602-2189. Thank you for your consideration and help.

Respectfully submitted,



Anand (Andy) P. Iyer, Ph.D.



Carol E. Rozek
Attorney for Applicants
Reg. No. 36,993

SEND ALL CORRESPONDENCE: TO:

Wyeth
Patent Law Department
Five Giralda Farms
Madison, NJ 07940
Tel. No. (845) 602-2189



25291

PATENT TRADEMARK OFFICE



ACY33,377
Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Metcalf, Thomas N. III et al.)
)
Serial No.: 09/674368)
)
Filed: April 29, 1999)
)
For: VACCINES CONTAINING RECOMBINANT)
PILIN AGAINST NEISSERIA GONORRHOEAE)
OR NEISSERIA MENINGITIDIS)
)
Customer No.: 25291)
)
Art Unit: TBD)
)
Examiner: Low, Christopher)

RESPONSE TO NOTICE TO COMPLY AND STATEMENT UNDER 37
C.F.R. §§1.821-1.825

August 22, 2002

Hon. Commissioner for Patents
U.S. Patent and Trademark Office
Box Sequence, P.O. Box 2327
Arlington, VA 22202

Dear Sir:

In a "Notification of Defective Response" dated March 18, 2002, the Patent Office rejected the computer-readable form and paper copy of the sequence listing for failing to adhere to the requirements of the sequence rules. The applicants have submitted herewith in response to the notification a substitute computer-readable form of the sequence together with the substitute paper copy in compliance with the requirements of 37 C.F.R. §§1.821-1.825. The applicants further state that the content of the paper and computer-readable

CERTIFICATE OF MAILING 37 CFR §1.10

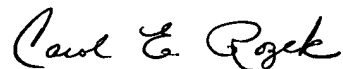
I hereby certify that this paper and the documents referred to as enclosed therein are being deposited with the United States Postal Service on the date written below in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number **ET 937 376 770 48** addressed to the Commissioner for Patents, Washington, DC 20231.

08/23/02
Date

Anand P. Iyer
Anand P. Iyer, Ph.D.

copies of the sequence listing submitted herewith are the same and include no new matter. Also attached herewith is a copy of the "Notification of Defective Response". The Applicants respectfully request reconsideration and entry of the substitute sequence listing, or in the event any fees are required for the entry of this paper and the sequence listing, the Patent Office is hereby authorized to charge Deposit Account No. 01-1425.

Respectfully submitted,



Carol E. Rozek
Attorney for Applicant
Reg. No. 36,993

Wyeth
Patent Law Department
Five Giralda Farms
Madison, NJ 07940
Tel. No. (845) 602-2189



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents, Box PCT
United States Patent and Trademark Office
Washington, D.C. 20231
www.uspto.govCC: PEARL RIVER
Page 1 of 2

U.S. APPLICATION NUMBER NO.

09/674,368

FIRST NAMED APPLICANT

Thomas N III Metcalf

ATTY. DOCKET NO.

33377-00

INTERNATIONAL APPLICATION NO.

PCT/US99/09486

I.A. FILING DATE

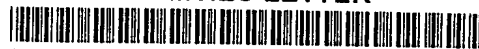
04/29/1999

PRIORITY DATE

Alan M Gordon
Patent Law Department 2B
American Home Products Corporation
One Campus Drive
Parsippany, NJ 07054

CONFIRMATION NO. 6981

371 FORMALITIES LETTER



OC000000007646414

Date Mailed: 03/18/2002

NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):

- U.S. Basic National Fee
- Biochemical Sequence Diskette
- Biochemical Sequence Listing
- Copy of IPE Report
- Copy of references cited in ISR
- Copy of the International Application
- Copy of the International Search Report
- Oath or Declaration

RECEIVED

APR - 2 2002

Anand P. Iyer
Patent Law Department
Pearl River, NY

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

The following items **MUST** be furnished within the period set forth below:

- The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):
 - The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).
- **APPLICANT-MUST-PROVIDE:**
 - An initial or substitute computer readable form (CRF) of the "Sequence Listing."

RECEIVED
MAR 28 2002



UNITED STATES PATENT AND TRADEMARK OFFICE

 Commissioner for Patents, Box PCT
 United States Patent and Trademark Office
 Washington, D.C. 20231
 www.uspto.gov

U.S. APPLICATION NUMBER NO.

09/674,368

FIRST NAMED APPLICANT

Thomas N III Metcalf

ATTY. DOCKET NO.

33377-00

INTERNATIONAL APPLICATION NO.

PCT/US99/09486

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Alan M Gordon
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 American Home Products Corporation
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 - The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).
- **APPLICANT MUST PROVIDE:**
 - An initial or substitute computer readable form (CRF) of the "Sequence Listing."

• For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- For Rules Interpretation, call (703) 308-4216
- To Purchase PatentIn Software, call (703) 306-2600
- For PatentIn Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

- The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

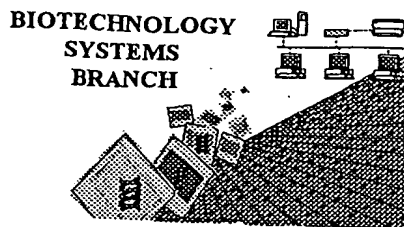
*A copy of this notice **MUST** be returned with the response.*

DEBORAH D WILLIAMS

Telephone: (703) 305-3744

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
09/674,368	PCT/US99/09486	33377-00



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/674,368 A
Source: Pt 109
Date Processed by STIC: 2/6/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER
VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name,
Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two,
2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office,
Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

DL

SUED
1231-2001
Mail

Raw Sequence Listing Error Summary

OR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 09/674,368A

NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
Misaligned Amino Numbering	The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
Variable Length	Sequence(s) _____ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) <u>2,4</u> . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
Skipped Sequences (OLD RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
Skipped Sequences (NEW RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa; and which residue n or Xaa represents.
Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
Use of <220>	Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
Abuse of n	n can only be used to represent a single nucleotide in a nucleic acid sequence. It is not used to represent any value not specifically a nucleotide.



PCT09

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/674,368A

DATE: 02/06/2002
TIME: 14:15:57

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Output Set: N:\CRF3\02062002\I674368A.raw

mal-3
**Does Not Comply
Corrected Diskette Needed**

5 <110> APPLICANT: American Cyanamid Company
7 <120> TITLE OF INVENTION: Vaccines Containing Recombinant Pilin Against Neisseria
9 Gonorrhoeae or Neisseria Meningitidis
11 <130> FILE REFERENCE: 33377-00/PCT
13 <140> CURRENT APPLICATION NUMBER: US/09/674,368A
14 <141> CURRENT FILING DATE: 2001-12-11
16 <160> NUMBER OF SEQ ID NOS: 24
18 <170> SOFTWARE: PatentIn Ver. 2.0
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 504
22 <212> TYPE: DNA
23 <213> ORGANISM: Artificial Sequence
25 <220> FEATURE:
26 <223> OTHER INFORMATION: Description of Artificial Sequence:Chimeric of
27 Neisseria Meningitidis Class I and Neisseria
28 Gonorrhoeae
30 <220> FEATURE:
31 <221> NAME/KEY: CDS
32 <222> LOCATION: (1)..(501)
34 <400> SEQUENCE: 1

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37	Met	Asp	Thr	Leu	Gln	Lys	Gly	Phe	Thr	Leu	Ile	Glu	Leu	Met	Ile	Val	
38	1				5					10						15	
40	atc	gcc	atc	gtc	ggc	att	ttg	gcg	gca	gtc	gcc	ctt	ccc	gcc	tac	caa	96
41	Ile	Ala	Ile	Val	Gly	Ile	Leu	Ala	Ala	Val	Ala	Leu	Pro	Ala	Tyr	Gln	
42				20					25					30			
44	gac	tac	acc	gcc	cgc	gcg	caa	gtt	tcc	gaa	gcc	atc	ctt	ttg	gcc	gaa	144
45	Asp	Tyr	Thr	Ala	Arg	Ala	Gln	Val	Ser	Glu	Ala	Ile	Leu	Leu	Ala	Glu	
46			35					40					45				
48	ggt	caa	aaa	tca	gcc	gtt	acc	gag	tat	tac	ctg	aat	cac	ggc	gaa	tgg	192
49	Gly	Gln	Lys	Ser	Ala	Val	Thr	Glu	Tyr	Tyr	Leu	Asn	His	Gly	Glu	Trp	
50		50					55				60						
52	ccc	ggc	aac	aac	act	tct	gcc	ggc	gtg	gca	tct	tct	tca	aca	atc	aaa	240
53	Pro	Gly	Asn	Asn	Thr	Ser	Ala	Gly	Val	Ala	Ser	Ser	Ser	Thr	Ile	Lys	
54	65				70					75				80			
58	ggc	aaa	tat	gtt	aag	gaa	gtt	aca	gtc	gca	aac	ggc	gtc	att	acc	gcc	288
59	Gly	Lys	Tyr	Val	Lys	Glu	Val	Thr	Val	Ala	Asn	Gly	Val	Ile	Thr	Ala	
60		85			85		90			90		95		95			
62	aca	atg	ctt	tca	agc	ggc	gta	aac	aaa	gaa	atc	caa	ggc	aaa	aaa	ctc	336
63	Thr	Met	Leu	Ser	Ser	Gly	Val	Asn	Lys	Glu	Ile	Gln	Gly	Lys	Lys	Leu	
64			100					105						110			
66	tcc	ctg	tgg	gcc	aag	cgt	caa	gac	ggt	tcg	gta	aaa	tgg	ttc	tgc	gga	384
67	Ser	Leu	Trp	Ala	Lys	Arg	Gln	Asp	Gly	Ser	Val	Lys	Trp	Phe	Cys	Gly	

for numbering

RAW SEQUENCE LISTING

DATE: 02/06/2002

PATENT APPLICATION: US/09/674,368A

TIME: 14:15:57

Input Set : A:\33377PCT.APP.txt

Output Set: N:\CRF3\02062002\I674368A.raw

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70 cag ccg gtt acg cgc acc gac gcc aaa gcc gac acc gtc gcc gcc gcc 432
71 Gln Pro Val Thr Arg Thr Asp Ala Lys Ala Asp Thr Val Ala Ala Ala
72          130          135          140
74 gcc aag acc gcc gac aac atc aac acc aag cac ctg ccg tca acc tgc 480
75 Ala Lys Thr Ala Asp Asn Ile Asn Thr Lys His Leu Pro Ser Thr Cys
> 76 145          150          155          160
78 cgc gac gca agt gat gcc agc taa 504
79 Arg Asp Ala Ser Asp Ala Ser
> 80          165
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83 <211> LENGTH: 167
84 <212> TYPE: PRT
85 <213> ORGANISM: Artificial Sequence
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> 87 <223> OTHER INFORMATION:
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89 1 5 10 15
91 Ile Ala Ile Val Gly Ile Leu Ala Ala Val Ala Leu Pro Ala Tyr Gln
92 20 25 30
95 Asp Tyr Thr Ala Arg Ala Gln Val Ser Glu Ala Ile Leu Leu Ala Glu
96 35 40 45
99 Gly Gln Lys Ser Ala Val Thr Glu Tyr Tyr Leu Asn His Gly Glu Trp
100 50 55 60
103 Pro Gly Asn Asn Thr Ser Ala Gly Val Ala Ser Ser Ser Thr Ile Lys
104 65 70 75 80
107 Gly Lys Tyr Val Lys Glu Val Thr Val Ala Asn Gly Val Ile Thr Ala
108 85 90 95
111 Thr Met Leu Ser Ser Gly Val Asn Lys Glu Ile Gln Gly Lys Lys Leu
112 100 105 110
115 Ser Leu Trp Ala Lys Arg Gln Asp Gly Ser Val Lys Trp Phe Cys Gly
116 115 120 125
118 Gln Pro Val Thr Arg Thr Asp Ala Lys Ala Asp Thr Val Ala Ala Ala
119 130 135 140
121 Ala Lys Thr Ala Asp Asn Ile Asn Thr Lys His Leu Pro Ser Thr Cys
122 145 150 155 160
124 Arg Asp Ala Ser Asp Ala Ser
125 165
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133 <220> FEATURE:
134 <223> OTHER INFORMATION: Description of Artificial Sequence:Chimeric of
135 Neisseria Meningitidis Class II and Neisseria
136 Gonorrhoeae
138 <220> FEATURE:
139 <221> NAME/KEY: CDS

```

see item 6 on Error Summary Sheet

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/674,368A

DATE: 02/06/2002

TIME: 14:15:57

Input Set : A:\33377PCT.APP.txt

Output Set: N:\CRF3\02062002\I674368A.raw

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142 <400> SEQUENCE: 3

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145	1				5					10					15		
147	atc	gcc	atc	gtc	ggt	atc	ttg	gca	gcc	gtc	gcc	ctg	ccc	gca	tac	caa	96
148	Ile	Ala	Ile	Val	Gly	Ile	Leu	Ala	Ala	Val	Ala	Leu	Pro	Ala	Tyr	Gln	
149				20				25					30				
151	gac	tac	acc	gcg	cgc	gcc	caa	atg	tcc	gaa	gcc	ctg	act	ttg	gca	gaa	144
152	Asp	Tyr	Thr	Ala	Arg	Ala	Gln	Met	Ser	Glu	Ala	Leu	Thr	Leu	Ala	Glu	
153			35				40					45					
155	ggt	caa	aaa	tcc	gca	gtg	atc	gag	tat	tat	tcc	gac	aac	ggc	aca	ttc	192
156	Gly	Gln	Lys	Ser	Ala	Val	Ile	Glu	Tyr	Tyr	Ser	Asp	Asn	Gly	Thr	Phe	
157		50				55					60						
159	ccg	aac	agc	aat	act	tcc	gca	ggt	att	gct	gcc	tct	aac	gag	att	aaa	240
160	Pro	Asn	Ser	Asn	Thr	Ser	Ala	Gly	Ile	Ala	Ala	Ser	Asn	Glu	Ile	Lys	
161	65				70					75					80		
163	ggt	aag	tat	gtg	gca	tcg	gtt	aag	gtt	gaa	ggt	aat	gcc	tct	gtt	gct	288
164	Gly	Lys	Tyr	Val	Ala	Ser	Val	Lys	Val	Glu	Gly	Asn	Ala	Ser	Val	Ala	
165				85				90				95					
167	tct	att	acc	gct	acc	atg	aac	tct	agt	aat	gtg	aat	aag	gac	atc	aaa	336
168	Ser	Ile	Thr	Ala	Thr	Met	Asn	Ser	Ser	Asn	Val	Asn	Lys	Asp	Ile	Lys	
169			100				105					110					
172	ggt	aaa	acc	ttg	gta	ctc	gtc	ggc	aaa	caa	aac	tcc	ggt	tcg	gta	aaa	384
173	Gly	Lys	Thr	Leu	Val	Leu	Val	Gly	Lys	Gln	Asn	Ser	Gly	Ser	Val	Lys	
174		115				120					125						
176	tgg	ttc	tgc	gga	cag	ccg	gtt	acg	cgc	gac	aac	gcc	gac	aac	gac	gac	432
177	Trp	Phe	Cys	Gly	Gln	Pro	Val	Thr	Arg	Asp	Asn	Ala	Asp	Asn	Asp	Asp	
178		130				135				140							
180	gtc	aaa	gac	gcc	ggc	aac	aac	ggc	atc	gaa	acc	aag	cac	ctg	ccg	tca	480
181	Val	Lys	Asp	Ala	Gly	Asn	Asn	Gly	Ile	Glu	Thr	Lys	His	Leu	Pro	Ser	
182	145				150			155				160					
184	acc	tgc	cgc	gat	acg	tca	tct	gat	gcc	aaa							510
185	Thr	Cys	Arg	Asp	Thr	Ser	Ser	Asp	Ala	Lys							
186			165				170										

189 <210> SEQ ID NO: 4

190 <211> LENGTH: 170

191 <212> TYPE: PRT

192 <213> ORGANISM: Artificial Sequence

194 <220> FEATURE:

194 <223> OTHER INFORMATION: *Item 6*

194 <400> SEQUENCE: 4

195	Met	Glu	Ala	Ile	Gln	Lys	Gly	Phe	Thr	Leu	Ile	Glu	Leu	Met	Ile	Val	
196	1				5					10					15		
198	Ile	Ala	Ile	Val	Gly	Ile	Leu	Ala	Ala	Val	Ala	Leu	Pro	Ala	Tyr	Gln	
199			20				25					30					
201	Asp	Tyr	Thr	Ala	Arg	Ala	Gln	Met	Ser	Glu	Ala	Leu	Thr	Leu	Ala	Glu	
202			35				40					45					
204	Gly	Gln	Lys	Ser	Ala	Val	Ile	Glu	Tyr	Tyr	Ser	Asp	Asn	Gly	Thr	Phe	

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/674,368A

DATE: 02/06/2002

TIME: 14:15:57

Input Set : A:\33377PCT.APP.txt

Output Set: N:\CRF3\02062002\I674368A.raw

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205      50      55      60
207 Pro Asn Ser Asn Thr Ser Ala Gly Ile Ala Ala Ser Asn Glu Ile Lys
208 65      70      75      80
210 Gly Lys Tyr Val Ala Ser Val Lys Val Glu Gly Asn Ala Ser Val Ala
211      85      90      95
213 Ser Ile Thr Ala Thr Met Asn Ser Ser Asn Val Asn Lys Asp Ile Lys
214      100      105      110
216 Gly Lys Thr Leu Val Leu Val Gly Lys Gln Asn Ser Gly Ser Val Lys
217      115      120      125
219 Trp Phe Cys Gly Gln Pro Val Thr Arg Asp Asn Ala Asp Asn Asp Asp
220      130      135      140
222 Val Lys Asp Ala Gly Asn Asn Gly Ile Glu Thr Lys His Leu Pro Ser
223 145      150      155      160
225 Thr Cys Arg Asp Thr Ser Ser Asp Ala Lys
226      165      170
230 <210> SEQ ID NO: 5
231 <211> LENGTH: 30
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233 <213> ORGANISM: Neisseria gonorrhoeae
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236 ccccgcgcca tggataccct tcaaaaaggc 30
239 <210> SEQ ID NO: 6
240 <211> LENGTH: 30
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244 <400> SEQUENCE: 6
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250 <212> TYPE: DNA
251 <213> ORGANISM: Neisseria gonorrhoeae
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256 <210> SEQ ID NO: 8
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258 <212> TYPE: DNA
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264 <210> SEQ ID NO: 9
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267 <213> ORGANISM: Neisseria gonorrhoeae
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272 <210> SEQ ID NO: 10
273 <211> LENGTH: 28
274 <212> TYPE: DNA
275 <213> ORGANISM: Neisseria gonorrhoeae

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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/674,368A

DATE: 02/06/2002
TIME: 14:15:57

Input Set : A:\33377PCT.APP.txt
Output Set: N:\CRF3\02062002\I674368A.raw

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283 <212> TYPE: DNA	
284 <213> ORGANISM: Neisseria Meningitidis Class I	
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300 <212> TYPE: DNA	
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VERIFICATION SUMMARY

DATE: 02/06/2002

PATENT APPLICATION: US/09/674,368A

TIME: 14:15:59

Input Set : A:\33377PCT.APP.txt

Output Set: N:\CRF3\02062002\I674368A.raw

M:270 C: Current Application Number differs, Replaced Application Number
M:271 C: Current Filing Date differs, Replaced Current Filing Date
M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
M:258 W: Mandatory Feature missing, <220> FEATURE:
M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
M:258 W: Mandatory Feature missing, <220> FEATURE:
M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:

Wyeth

May 2, 2002

Mr. Robert Sparr, Esq.
U.S. Patent and Trademark Office
Washington, D.C. 20231

Re: U.S. Application No. ACY-33377-00
Serial No. 09/674368
Assignee: American Cyanamid Company
Inventors: Metcalf et al.
Title: Vaccines Containing Recombinant Pilin Against Neisseria Gonorrhoeae

Dear Mr. Sparr:

I am writing this letter, pursuant to our telephone conversation of April 24, 2002, to request you to make a determination as to whether, based on the facts set out below, the Patent Office (the "Office") would be willing to withdraw the holding of abandonment in the above-identified application and provide the Applicants with an extension of time to respond to the "Notification of Defective Response."

STATEMENT OF MATERIAL FACTS AND REASONS FOR GRANTING RELIEF

The above-identified application (U.S. serial No. 09/674368) was filed as a "National Stage" application under 35 U.S.C. §371 on October 27, 2000, from a PCT application, International Application Number PCT/US99/09486, filed on April 29, 1999, and claims priority from U.S. Provisional Application No. 60/083,405 filed April 29, 1998.

The application as filed contained a sequence listing both in a computer readable form and as a paper copy, which was generated using PatentIn Version 2.0.

On June 11, 2001, the Office mailed a "Notification to Comply with Requirements for Patent Application Containing Nucleotide Sequences and/or Amino Acid Disclosures" (the "Notification"), wherein the Office stated that the "computer readable form that had been filed with this application has been found to be damaged and/or unreadable" and requested the Applicants to submit a substitute computer readable sequence listing as required under 37 C.F.R. §§ 1.821 - 1.825. Specifically, in the Raw Sequence Listing Error Report (the "Report") mailed with the Notification the following errors were identified:

- (1) The number/text at the end of each line wrapped down to the next line; and
- (2) The file was not saved in ASC II (DOS) text as required by the sequence rules. (see Exhibit 1).

The report further cautioned the Applicants not to use the "copy to disk" function of the PatentIn Version 2.0 as a "bug" in the software would cause a corrupted file resulting in missing mandatory numeric identifiers and responses.

On December 12, 2001, the Applicants filed a response to the "Notification" with a petition for extension of time and fees. Along with the response, the Applicants submitted a substitute computer readable form and a paper copy of the sequence listing wherein the Applicants corrected the errors that were identified in the Report, together with a statement as required under 37 C.F.R. §§ 1.825. In generating the computer readable form of the sequence listing, wherein the errors identified in the Report were corrected, the Applicants used PatentIn Version 3.0 and the "Sequence Checker" function of Version 3.0.

On March 18, 2002, the Office mailed a "Notification of Defective Response" and set a "time limit of one month from the date of this Notification or the Notice of Missing Requirements, whichever is longer." The only error identified in the Raw Sequence Listing Error Summary Report that was sent with the Notification of Defective Response was an error caused by a "bug" in PatentIn Version 2.0, which caused sections <220> through <223> to be missing from amino acid sequences 2 and 4. (see Exhibit 2). The Report in paragraph 6

further stated that, “[n]ormally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence,” and that the only way to rectify this error is to “manually copy the relevant <220> <223> section to the subsequent amino acid sequence.”

The Applicants respectfully submit that the Applicants followed the suggestions of the Office in generating a substitute computer readable form of the sequence listing in responding to the Notification of July 11, 2001. The Applicants submit that due to software incompatibility between PatentIn Version 2.0 and the Version 3.0, the software failed to automatically generate sections <220> through <223> in the amino acid sequences 2 and 4. Furthermore, since the March 18, 2002 suggestion to manually copy the relevant sections <220> through <223> from the nucleic acid sequence 1 and 3 into the amino acid sequences 2 and 4 was not made in the “Raw Sequence Listing Error Report” mailed with the “Notification” of July 11, 2001, the Applicants were unaware that the missing mandatory sections needed to be corrected.

In view of the above, the Applicants respectfully request that the Office withdraw the holding of abandonment. The Applicants further request that the Applicants be granted an extension of time to file a response to the “Notification of Defective Response” together with a substitute computer readable form of the sequence listing.

Wyeth

-4-

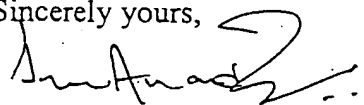
S.N.09/674368

CONCLUSION

In view of the material facts set forth above, the Applicants respectfully request that the holding of abandonment be withdrawn, and the Applicants be granted relief to submit a substitute corrected computer readable form of the sequence listing.

Should you need to contact me or need any additional information, please do not hesitate to call me at #(845) 602-2189.

Sincerely yours,


Anand (Andy) P. Iyer, Ph.D.



Alan M. Gordon
Reg. No. 30,637
Attorney for Applicants

AIP/awp

Wyeth

S.N.09/674368

EXHIBIT A

NOTIFICATION TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant has submitted papers under 35 U.S.C. 371 to enter the national stage in the United States of America. The items indicated below, however, are missing. The period within which to correct the deficiency noted below and avoid abandonment is set forth in the accompanying Notification.

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):

- ☐ The application fails to comply with the requirements of 37 CFR 1.821-1.825.
- ☐ This application does not contain, a "Sequence Listing" as a separate part of the disclosure on paper copy or compact disc, as required by 37 CFR 1.821(c).
- ☐ A copy of the "Sequence Listing" in computer readable format has not been submitted as required by 37 CFR 1.821(e).
- ☐ A copy of the "Sequence Listing" in computer readable form has been submitted. The content of the computer readable form, however, does not comply with the requirements of 37 CFR 1.822 and/or 1.832, as indicated on the attached marked-up copy of the "Raw Sequence Listing."
- ☒ The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).
- ☐ The paper copy or compact disc of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 CFR 1.821(e).
- ☐ Other: _____

APPLICANT MUST PROVIDE:

- ☒ An initial or substitute computer readable form (CRF) of the "Sequence Listing."
- ☐ An initial or substitute paper copy or compact disc of the "Sequence Listing," as well as an amendment directing its entry into the specification.
- ☒ A statement that the contents of the paper or compact disc and the computer readable form are the same and, where applicable, include no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b) or 1.825(d).

FOR QUESTIONS REGARDING COMPLIANCE WITH THESE REQUIREMENTS, PLEASE CALL:

(703) 308-4216, for Rules interpretation,
(703) 308-4212, for CRF submission help,
(703) 287-0200, for PatentIn software help.

Deborah D. Williams 

Telephone: 703-305-3744

NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

1. The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as ☐ a Designated Office (37 CFR 1.494) ☒ an Elected Office (37 CFR 1.495):

- | | |
|--|--|
| <input checked="" type="checkbox"/> U.S. Basic National Fee. | <input type="checkbox"/> Indication of Small Entity Status. |
| <input checked="" type="checkbox"/> Copy of the international application. | <input checked="" type="checkbox"/> Translation of the international application into English. |
| <input checked="" type="checkbox"/> Oath or Declaration of inventors(s). | <input type="checkbox"/> Translation of Article 19 amendments into English. |
| <input type="checkbox"/> Copy of Article 19 amendments. | <input type="checkbox"/> Other: |
| <input type="checkbox"/> Priority Document. | |
| <input checked="" type="checkbox"/> The International Preliminary Examination Report in English and its Annexes, if any. | |
| <input type="checkbox"/> Translation of Annexes to the International Preliminary Examination Report into English. | |

2. ☐ Applicant has requested early processing under 35 U.S.C. 371(f) but has not filed the following indicated items and/or the indicated items in paragraph 3 below. The Basic National Fee and the copy of the international application must be filed prior to 20 or 30 months from the priority date to avoid abandonment.

- ☐ U.S. Basic National Fee. ☐ Copy of the international application.

3. The following items MUST be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- ☐ a. Translation of the application into English. A processing fee will be required if submitted later than the appropriate 20 or 30 months from the priority date.
- ☐ The current translation is defective for the reasons indicated on the attached Notice of Defective Translation.
- ☐ b. Processing fee for providing the translation of the application and/or the Annexes later than the appropriate 20 or 30 months from the priority date (37 CFR 1.492(f)).
- ☐ c. Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), properly identifying the application (preferably by the International application number and international filing date). A surcharge will be required if submitted later than the appropriate 20 or 30 months from the priority date.
- ☐ The current oath or declaration does not comply with 37 CFR 1.497(a) and (b) for the reasons indicated on the attached PCT/DO/EO/917.
- ☐ d. Surcharge for providing the oath or declaration later than the appropriate 20 or 30 months from the priority date (37 CFR 1.492(e)).

4. Additional claim fees of \$_____ as a ☐ large entity ☐ small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due (37 CFR 1.492(g)). See attached PTO-875.

5. ☒ Applicant has not submitted the required sequence listing pursuant to 37 CFR 1.821-1.825. See attached PCT/DO/EO/920.

ALL OF THE ITEMS SET FORTH IN 3(a)-3(d), 4 AND 5 ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 22 OR 32 MONTHS (where 37 CFR 1.495 applies) FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

6. If box 3a or 3c is checked, a translation of the Annexes MUST be submitted no later than the time period set above or the Annexes will be cancelled. A processing fee will be required if submitted later than 20 or 30 months from the priority date.

7. ☐ The Article 19 amendments are cancelled since a translation was not provided by the appropriate 20 (37 CFR 1.494(d)) or 30 (37 CFR 1.495(d)) months from the priority date.

Applicant is reminded that any communication to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above. (37 CFR 1.5)

A copy of this notice MUST be returned with this response.

Enclosed: ☐ PCT/DO/EO/917 ☐ Notice of Defective Translation
☐ PTO-875 ☒ PCT/DO/EO/920

Deborah D. Williams *DW*

(ad) 6/14/01
TE MAILED: 1 15 0001 1001

NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

1. The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as ☐ a Designated Office (37 CFR 1.494) ☒ an Elected Office (37 CFR 1.495):

- | | |
|--|--|
| <input checked="" type="checkbox"/> U.S. Basic National Fee. | <input type="checkbox"/> Indication of Small Entity Status. |
| <input checked="" type="checkbox"/> Copy of the international application. | <input checked="" type="checkbox"/> Translation of the international application into English. |
| <input checked="" type="checkbox"/> Oath or Declaration of inventor(s). | <input type="checkbox"/> Translation of Article 19 amendments into English. |
| <input type="checkbox"/> Copy of Article 19 amendments. | <input type="checkbox"/> Other: |
| <input type="checkbox"/> Priority Document. | |
| <input checked="" type="checkbox"/> The International Preliminary Examination Report in English and its Annexes, if any. | |
| <input type="checkbox"/> Translation of Annexes to the International Preliminary Examination Report into English. | |

2. ☐ Applicant has requested early processing under 35 U.S.C. 371(f) but has not filed the following indicated items and/or the indicated items in paragraph 3 below. The Basic National Fee and the copy of the international application must be filed prior to 20 or 30 months from the priority date to avoid abandonment.

- ☐ U.S. Basic National Fee. ☐ Copy of the international application.

3. The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- ☐ a. Translation of the application into English. A processing fee will be required if submitted later than the appropriate 20 or 30 months from the priority date.
- ☐ The current translation is defective for the reasons indicated on the attached Notice of Defective Translation.
- ☐ b. Processing fee for providing the translation of the application and/or the Annexes later than the appropriate 20 or 30 months from the priority date (37 CFR 1.492(f)).
- ☐ c. Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), properly identifying the application (preferably by the International application number and international filing date). A surcharge will be required if submitted later than the appropriate 20 or 30 months from the priority date.
- ☐ The current oath or declaration does not comply with 37 CFR 1.497(a) and (b) for the reasons indicated on the attached PCT/DO/EO/917.
- ☐ d. Surcharge for providing the oath or declaration later than the appropriate 20 or 30 months from the priority date (37 CFR 1.492(e)).

4. Additional claim fees of \$_____ as a ☐ large entity ☐ small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due (37 CFR 1.492(g)). See attached PTO-875.

5. ☒ Applicant has not submitted the required sequence listing pursuant to 37 CFR 1.821-1.825. See attached PCT/DO/EO/920.

ALL OF THE ITEMS SET FORTH IN 3(a)-3(d), 4 AND 5 ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 22 OR 32 MONTHS (where 37 CFR 1.495 applies) FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

6. If box 3a or 3c is checked, a translation of the Annexes **MUST** be submitted no later than the time period set above or the Annexes will be cancelled. A processing fee will be required if submitted later than 20 or 30 months from the priority date.

7. ☐ The Article 19 amendments are cancelled since a translation was not provided by the appropriate 20 (37 CFR 1.494(d)) or 30 (37 CFR 1.495(d)) months from the priority date.

Applicant is reminded that any communication to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above. (37 CFR 1.5)

A copy of this notice MUST be returned with this response.

Enclosed: ☐ PCT/DO/EO/917 ☐ Notice of Defective Translation
☐ PTO-875 ☒ PCT/DO/EO/920

Deborah D. Williams *DDW*

FORM PCT/DO/EO/905 (March 2001).

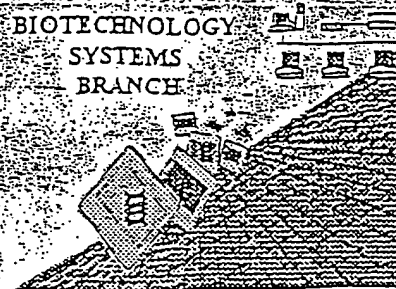
Telephone: 703-305-3744

RECEIVED

JUN 13 2001

ANNE ITE CROMER

BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

09/674,368

Source:

PCT/09

Date Processed by STIC:

3/07/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER
VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW.

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Raw Sequence Listing Error Summary

ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER: 09/674,368

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 ☒ 1 Wrapped Nucleics The number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 2 ☐ 2 Wrapped Aminos The amino acid number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 3 ☐ 3 Incorrect Line Length The rules require that a line not exceed 72 characters in length. This includes spaces.
- 4 ☐ 4 Misaligned Amino Acid Numbering The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
- 5 ☒ 5 Non-ASCII This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
- 6 ☐ 6 Variable Length Sequence(s) _____ contain n's or Xaa's which represented more than one residue.
As per the rules, each n or Xaa can only represent a single residue.
Please present the maximum number of each residue having variable length and indicate in the (ix) feature section that some may be missing.
- 7 ☐ 7 PatentIn ver. 2.0 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 8 ☐ 8 Skipped Sequences (OLD RULES) Sequence(s) _____ missing. If intentional, please use the following format for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X:
(i) SEQUENCE CHARACTERISTICS: (Do not insert any headings under "SEQUENCE CHARACTERISTICS")
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:X:
This sequence is intentionally skipped

Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
- 9 ☐ 9 Skipped Sequences (NEW RULES) Sequence(s) _____ missing. If intentional, please use the following format for each skipped sequence.
<210> sequence id number
<400> sequence id number
000
- 10 ☐ 10 Use of n's or Xaa's (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 11 ☐ 11 Use of <213> Organism (NEW RULES) Sequence(s) _____ are missing this mandatory field or its response.
- 12 ☐ 12 Use of <220> Feature (NEW RULES) Sequence(s) _____ are missing the <220> Feature and associated headings.
Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial" or "Unknown".
Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rule)
- 13 ☒ 13 PatentIn ver. 2.0 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file resulting in missing mandatory numeric identifiers and responses (as indicated on this sequence listing).

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/674,368

DATE: 03/07/2001
TIME: 11:37:48

Does Not Comply
Corrected Diskette Needed

Input Set : A:\PTO.txt
Output Set: N:\CRF3\03072001\I674368.raw

5 <110> APPLICANT: American Cyanamid Company
7 <120> TITLE OF INVENTION: Vaccines Containing Recombinant Pilin Against Neisseria
9 Gonorrhoeae or Neisseria Meningitidis
11 <130> FILE REFERENCE: 33377-00/PCT
13 <140> CURRENT APPLICATION NUMBER: US/09/674,368
14 <141> CURRENT FILING DATE: 2000-10-27
15 <160> NUMBER OF SEQ ID NOS: 24
18 <170> SOFTWARE: PatentIn Ver. 2.0

*see item 5 on Enol
Summary Sheet*

ERRORED SEQUENCES

299 <210> SEQ ID NO: 13
300 <211> LENGTH: 31
301 <212> TYPE: DNA
303 <213> ORGANISM: Neisseria Meningitidis Class I
305 <400> SEQUENCE: 13
E--> 306 ccggcgcggtc tctcacggcg aatggcccg c
307 31
396 <210> SEQ ID NO: 24
397 <211> LENGTH: 22
398 <212> TYPE: PRT
399 <213> ORGANISM: Neisseria gonorrhoeae
404 <400> SEQUENCE: 24
405 Glu Ala Ile Leu Leu Ala Glu Gly Gln Lys Ser Ala Val Thr Glu Tyr
406 1 5 10 15
408 Tyr Leu Asn His Gly Lys
410 20
E--> 441 1
E--> 443 8
445 ACY-33377-00

*move up - format enol
(see item 1 on
Enol Summary
Sheet)*

delete at end of file

see following pages for more errors

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/674,368

DATE: 03/07/2001

TIME: 11:37:50

Input Set : A:\PTO.txt

Output Set: N:\CRF3\03072001\I674368.raw

L:13 M:270 C: Current Application Number differs, Replaced Application Number
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:60 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:64 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:68 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:72 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:76 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:80 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:87 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:87 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:194 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:194 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:306 M:254 E: No. of Bases conflict. LENGTH:Input:0 Counted:31 SEQ:13
L:441 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:24
M:332 Repeated in SeqNo=24

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/674,368

DATE: 03/14/2001
TIME: 12:10:34

Input Set : A:\Pto.amc
Output Set: N:\CRF3\03142001\I674368.raw

142 1 5 10 15
144 atc gcc atc gtc ggt atc ttg gca gcc gtc gcc ctg ccc gca tac caa 96
145 ile ala ile val gly ile leu ala ala val ala leu pro ala tyr gln
146 20 25 30
148 gac tac acc gcg cgc gcc caa atg tcc gaa gcc ctg act ttg gca gaa 144
149 asp tyr thr ala arg ala gln met ser glu ala leu thr leu ala glu
150 35 40 45
152 ggt caa aaa tcc gca gtg atc gag tat tat tcc gac aac ggc aca ttc 192
153 gly gln lys ser ala val ile glu tyr tyr ser asp asn gly thr phe
154 50 55 60
156 ccg aac agc aat act tcc gca ggt att gct gcc tct aac gag att aaa 240
157 pro asn ser asn thr ser ala gly ile ala ala ser asn glu ile lys
158 65 70 75 80
160 ggt aag tat gtg gca tcg gtt aag gtt gaa ggt aat gcc tct gtt gct 288
161 gly lys tyr val ala ser val lys val glu gly asn ala ser val ala
162 85 90 95
164 tct att acc gct acc atg aac tct agt aat gtg aat aag gac atc aaa 336
165 ser ile thr ala thr met asn ser ser asn val asn lys asp ile lys
166 100 105 110
169 ggt aaa acc ttg gta ctc gtc ggc aaa caa aac tcc ggt tcg gta aaa 384
170 gly lys thr leu val leu val gly lys gln asn ser gly ser val lys
171 115 120 125
173 tgg ttc tgc gga cag ccg gtt acg cgc gac aac gcc gac aac gac gac 432
174 trp phe cys gly gln pro val thr arg asp asn ala asp asn asp asp
175 130 135 140
177 gtc aaa gac gcc ggc aac aac ggc atc gaa acc aag cac ctg ccg tca 480
178 val lys asp ala gly asn asn gly ile glu thr lys his leu pro ser
179 145 150 155 160
181 acc tgc cgc gat acg tca tct gat gcc aaa 510
182 thr cys arg asp thr ser ser asp ala lys
183 165 170
186 <210> SEQ ID NO: 4
187 <211> LENGTH: 170
188 <212> TYPE: PRT
189 <213> ORGANISM: Artificial Sequence
W--> 191 <220> FEATURE:
W--> 191 <223> OTHER INFORMATION:
191 <400> SEQUENCE: 4
192 Met Glu Ala Ile Gln Lys Gly Phe Thr Leu Ile Glu Leu Met Ile Val
193 1 5 10 15
195 Ile Ala Ile Val Gly Ile Leu Ala Ala Val Ala Leu Pro Ala Tyr Gln
196 20 25 30
198 Asp Tyr Thr Ala Arg Ala Gln Met Ser Glu Ala Leu Thr Leu Ala Glu
199 35 40 45
201 Gly Gln Lys Ser Ala Val Ile Glu Tyr Tyr Ser Asp Asn Gly Thr Phe
202 50 55 60
204 Pro Asn Ser Asn Thr Ser Ala Gly Ile Ala Ala Ser Asn Glu Ile Lys
205 65 70 75 80
207 Gly Lys Tyr Val Ala Ser Val Lys Val Glu Gly Asn Ala Ser Val Ala

same env - see item 13
on Env
Summary Sheet

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/674,368

DATE: 03/14/2001

TIME: 12:10:34

Input Set : A:\Pto.amc

Output Set: N:\CRF3\03142001\I674368.raw

71 gcc aag acc gcc gac aac atc aac acc aag cac ctg ccg tca acc tgc 480
 72 Ala Lys Thr Ala Asp Asn Ile Asn Thr Lys His Leu Pro Ser Thr Cys
 W--> 73 145 150 155 160 504
 75 cgc gac gca agt gat gcc agc taa
 76 Arg Asp Ala Ser Asp Ala Ser
 W--> 77 165
 79 <210> SEQ ID NO: 2
 80 <211> LENGTH: 167
 81 <212> TYPE: PRT
 82 <213> ORGANISM: Artificial Sequence
 W--> 84 <220> FEATURE:
 W--> 84 <223> OTHER INFORMATION:
 84 <400> SEQUENCE: 2
 85 Met Asp Thr Leu Gln Lys Gly Phe Thr Leu Ile Glu Leu Met Ile Val
 86 1 5 10 15
 88 Ile Ala Ile Val Gly Ile Leu Ala Ala Val Ala Leu Pro Ala Tyr Gln
 89 20 25 30
 92 Asp Tyr Thr Ala Arg Ala Gln Val Ser Glu Ala Ile Leu Leu Ala Glu
 93 35 40 45
 96 Gly Gln Lys Ser Ala Val Thr Glu Tyr Tyr Leu Asn His Gly Glu Trp
 97 50 55 60
 100 Pro Gly Asn Asn Thr Ser Ala Gly Val Ala Ser Ser Ser Thr Ile Lys
 101 65 70 75 80
 104 Gly Lys Tyr Val Lys Glu Val Thr Val Ala Asn Gly Val Ile Thr Ala
 105 85 90 95
 108 Thr Met Leu Ser Ser Gly Val Asn Lys Glu Ile Gln Gly Lys Lys Leu
 109 100 105 110
 112 Ser Leu Trp Ala Lys Arg Gln Asp Gly Ser Val Lys Trp Phe Cys Gly
 113 115 120 125
 115 Gln Pro Val Thr Arg Thr Asp Ala Lys Ala Asp Thr Val Ala Ala Ala
 116 130 135 140
 118 Ala Lys Thr Ala Asp Asn Ile Asn Thr Lys His Leu Pro Ser Thr Cys
 119 145 150 155 160
 121 Arg Asp Ala Ser Asp Ala Ser
 122 165
 125 <210> SEQ ID NO: 3
 126 <211> LENGTH: 510
 127 <212> TYPE: DNA
 128 <213> ORGANISM: Artificial Sequence
 130 <220> FEATURE:
 131 <223> OTHER INFORMATION: Description of Artificial Sequence:Chimeric of
 132 Neisseria Meningitidis Class II and Neisseria
 133 Gonorrhoeae
 135 <220> FEATURE:
 136 <221> NAME/KEY: CDS
 137 <222> LOCATION: (1)..(510)
 139 <400> SEQUENCE: 3
 140 atg gaa gca atc caa aaa ggt ttc acc ctg atc gag ctg atg atc gtc 48
 141 Met Glu Ala Ile Gln Lys Gly Phe Thr Leu Ile Glu Leu Met Ile Val

see item 13 on
 Enn
 Summary
 sheet

Wyeth

S.N.09/674368

EXHIBIT B



U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
09/674,368	Thomas N III Metcalf	33377-00

INTERNATIONAL APPLICATION NO.

PCT/US99/09486

LA. FILING DATE	PRIORITY DATE
-----------------	---------------

04/29/1999

Alan M Gordon
Patent Law Department 2B
American Home Products Corporation
One Campus Drive
Parsippany, NJ 07054

CONFIRMATION NO. 6981

371 FORMALITIES LETTER



OC000000007646414

Date Mailed: 03/18/2002

NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):

- U.S. Basic National Fee
- Biochemical Sequence Diskette
- Biochemical Sequence Listing
- Copy of IPE Report
- Copy of references cited in ISR
- Copy of the International Application
- Copy of the International Search Report
- Oath or Declaration

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

Applicant is required to complete the response within a time limit of **ONE MONTH** from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

The following items **MUST** be furnished within the period set forth below:

- The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):

- The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).

■ APPLICANT MUST PROVIDE:

- An initial or substitute computer readable form (CRF) of the "Sequence Listing."

- For questions regarding compliance to 37 CFR 1.821, call (703) 308-4216
- For Rules Interpretation, call (703) 308-4216
- To Purchase PatentIn Software, call (703) 306-2600
- For PatentIn Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

- The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

A copy of this notice MUST be returned with the response.

DEBORAH D WILLIAMS

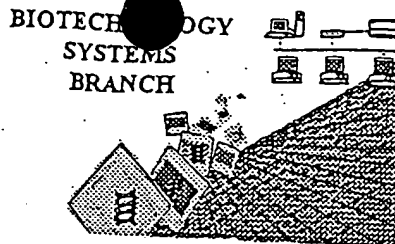
Telephone: (703) 305-3744

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
09/674,368	PCT/US99/09486	33377-00

FORM PCT/DO/EO/916 (371 Formalities Notice)

RAW SEQUENCE LISTING ERROR REPORT



DL
S020
1231-2001
Mail

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/674,368 A
Source: Pt 109
Date Processed by STIC: 2/6/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER
VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name,
Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two,
2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office,
Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 09/674,368A

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- ☐ Wrapped Nucleics
Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to 3; this will prevent "wrapping."
- ☐ Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- ☐ Misaligned Amino Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- ☐ Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- ☒ Variable Length Sequence(s) _____ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- ☒ PatentIn 2.0 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) 2,4. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- ☐ Skipped Sequences (OLD RULES) Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped.

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- ☐ Skipped Sequences (NEW RULES) Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000
- ☐ Use of n's or Xaa's (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- ☐ Invalid <213> Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence.
- ☐ Use of <220> Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- ☐ PatentIn 2.0 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- ☐ Misuse of n n can only be used to represent a single nucleotide in a nucleic acid sequence. It is not used to represent any value not specifically a nucleotide.



PCT09

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/674,368A

DATE: 02/06/2002
TIME: 14:15:57

Input Set : A:\33377PCT.APP.txt
Output Set: N:\CRF3\02062002\I674368A.raw

Does Not Comply
Corrected Diskette Needed

5 <110> APPLICANT: American Cyanamid Company
7 <120> TITLE OF INVENTION: Vaccines Containing Recombinant Pilin Against Neisseria
9 Gonorrhoeae or Neisseria Meningitidis
11 <130> FILE REFERENCE: 33377-00/PCT
13 <140> CURRENT APPLICATION NUMBER: US/09/674,368A
14 <141> CURRENT FILING DATE: 2001-12-11
16 <160> NUMBER OF SEQ ID NOS: 24
18 <170> SOFTWARE: PatentIn Ver. 2.0
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 504
22 <212> TYPE: DNA
23 <213> ORGANISM: Artificial Sequence
25 <220> FEATURE:
26 <223> OTHER INFORMATION: Description of Artificial Sequence: Chimeric of
27 Neisseria Meningitidis Class I and Neisseria
28 Gonorrhoeae
30 <220> FEATURE:
31 <221> NAME/KEY: CDS
32 <222> LOCATION: (1)..(501)
34 <400> SEQUENCE: 1

36 atg gat acc ctt caa aaa ggc ttt acc ctt atc gag ctg atg att gtg 48
37 Met Asp Thr Leu Gln Lys Gly Phe Thr Leu Ile Glu Leu Met Ile Val
38 1 5 10 15
40 atc gcc atc gtc ggc att ttg gcg gca gtc gcc ctt ccc gcc tac caa 96
41 Ile Ala Ile Val Gly Ile Leu Ala Ala Val Ala Leu Pro Ala Tyr Gln
42 20 25 30
44 gac tac acc gcc cgc gcg caa gtt tcc gaa gcc atc ctt ttg gcc gaa 144
45 Asp Tyr Thr Ala Arg Ala Gln Val Ser Glu Ala Ile Leu Leu Ala Glu
46 35 40 45
48 ggt caa aaa tca gcc gtt acc gag tat tac ctg aat cac ggc gaa tgg 192
49 Gly Gln Lys Ser Ala Val Thr Glu Tyr Tyr Leu Asn His Gly Glu Trp
50 50 55 60
52 ccc gcc aac aac act tct gcc ggc gtg gca tct tct tca aca atc aaa 240
53 Pro Gly Asn Asn Thr Ser Ala Gly Val Ala Ser Ser Ser Thr Ile Lys
54 65 70 75 80
58 ggc aaa tat gtt aag gaa gtt aca gtc gca aac ggc gtc att acc gcc 288
59 Gly Lys Tyr Val Lys Glu Val Thr Val Ala Asn Gly Val Ile Thr Ala
60 85 90 95 100
62 aca atg ctt tca agc ggc gta aac aaa gaa atc caa ggc aaa aaa ctc 336
63 Thr Met Leu Ser Ser Gly Val Asn Lys Glu Ile Gln Gly Lys Lys Leu
64 100 105 110
66 tcc ctg tgg gcc aag cgt caa gac ggt tcg gta aaa tgg ttc tgc gga 384
67 Ser Leu Trp Ala Lys Arg Gln Asp Gly Ser Val Lys Trp Phe Cys Gly

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/674,368A

DATE: 02/06/2002
TIME: 14:15:57

Input Set : A:\33377PCT.APP.txt
Output Set: N:\CRF3\02062002\I674368A.raw

-> 68 115 120 125
70 cag ccg gtt acg cgc acc gac gcc aaa gcc gac acc gtc gcc gcc gcc 432
71 Gln Pro Val Thr Arg Thr Asp Ala Lys Ala Asp Thr Val Ala Ala Ala
72 130 135 140
74 gcc aag acc gcc gac aac atc aac acc aag cac ctg ccg tca acc tgc 480
75 Ala Lys Thr Ala Asp Asn Ile Asn Thr Lys His Leu Pro Ser Thr Cys
-> 76 145 150 155 160
78 cgc gac gca agt gat gcc agc taa 504
79 Arg Asp Ala Ser Asp Ala Ser

-> 80 165
82 <210> SEQ ID NO: 2
83 <211> LENGTH: 167
84 <212> TYPE: PRT
85 <213> ORGANISM: Artificial Sequence

-> 87 <220> FEATURE:
-> 87 <223> OTHER INFORMATION:
87 <400> SEQUENCE: 2

see item 6 on Error Summary Sheet

88 Met Asp Thr Leu Gln Lys Gly Phe Thr Leu Ile Glu Leu Met Ile Val
89 1 5 10 15
91 Ile Ala Ile Val Gly Ile Leu Ala Ala Val Ala Leu Pro Ala Tyr Gln
92 20 25 30
95 Asp Tyr Thr Ala Arg Ala Gln Val Ser Glu Ala Ile Leu Leu Ala Glu
96 35 40 45
99 Gly Gln Lys Ser Ala Val Thr Glu Tyr Tyr Leu Asn His Gly Glu Trp
100 50 55 60
103 Pro Gly Asn Asn Thr Ser Ala Gly Val Ala Ser Ser Ser Thr Ile Lys
104 65 70 75 80
107 Gly Lys Tyr Val Lys Glu Val Thr Val Ala Asn Gly Val Ile Thr Ala
108 85 90 95
111 Thr Met Leu Ser Ser Gly Val Asn Lys Glu Ile Gln Gly Lys Lys Leu
112 100 105 110
115 Ser Leu Trp Ala Lys Arg Gln Asp Gly Ser Val Lys Trp Phe Cys Gly
116 115 120 125
118 Gln Pro Val Thr Arg Thr Asp Ala Lys Ala Asp Thr Val Ala Ala Ala
119 130 135 140
121 Ala Lys Thr Ala Asp Asn Ile Asn Thr Lys His Leu Pro Ser Thr Cys
122 145 150 155 160
124 Arg Asp Ala Ser Asp Ala Ser

125 165
128 <210> SEQ ID NO: 3
129 <211> LENGTH: 510
130 <212> TYPE: DNA
131 <213> ORGANISM: Artificial Sequence
133 <220> FEATURE:
134 <223> OTHER INFORMATION: Description of Artificial Sequence: Chimeric of
135 ~~Neisseria Meningitidis Class II and Neisseria~~
136 ~~Gonorrhoeae~~
138 <220> FEATURE:
139 <221> NAME/KEY: CDS

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/674,368A

DATE: 02/06/2002

TIME: 14:15:57

Input Set : A:\33377PCT.APP.txt

Output Set: N:\CRF3\02062002\I674368A.raw

140 <222> LOCATION: (1)..(510)

142 <400> SEQUENCE: 3

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143 atg gaa gca atc caa aaa ggt ttc acc ctg atc gag ctg atg atc gtc 48
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145 1 5 10 15
147 atc gcc atc gtc ggt atc ttg gca gcc gtc gcc ctg ccc gca tac caa 96
148 Ile Ala Ile Val Gly Ile Leu Ala Ala Val Ala Leu Pro Ala Tyr Gln
149 20 25 30
151 gac tac acc gcg cgc gcc caa atg tcc gaa gcc ctg act ttg gca gaa 144
152 Asp Tyr Thr Ala Arg Ala Gln Met Ser Glu Ala Leu Thr Leu Ala Glu
153 35 40 45
155 ggt caa aaa tcc gca gtg atc gag tat tat tcc gac aac ggc aca ttc 192
156 Gly Gln Lys Ser Ala Val Ile Glu Tyr Tyr Ser Asp Asn Gly Thr Phe
157 50 55 60
159 ccg aac agc aat act tcc gca ggt att gct gcc tct aac gag att aaa 240
160 Pro Asn Ser Asn Thr Ser Ala Gly Ile Ala Ala Ser Asn Glu Ile Lys
161 65 70 75 80
163 ggt aag tat gtg gca tcg gtt aag gtt gaa ggt aat gcc tct gtt gct 288
164 Gly Lys Tyr Val Ala Ser Val Lys Val Glu Gly Asn Ala Ser Val Ala
165 85 90 95
167 tct att acc gct acc atg aac tct agt aat gtg aat aag gac atc aaa 336
168 Ser Ile Thr Ala Thr Met Asn Ser Ser Asn Val Asn Lys Asp Ile Lys
169 100 105 110
172 ggt aaa acc ttg gta ctc gtc ggc aaa caa aac tcc ggt tcg gta aaa 384
173 Gly Lys Thr Leu Val Leu Val Gly Lys Gln Asn Ser Gly Ser Val Lys
174 115 120 125
176 tgg ttc tgc gga cag ccg gtt acg cgc gac aac gcc gac aac gac gac 432
177 Trp Phe Cys Gly Gln Pro Val Thr Arg Asp Asn Ala Asp Asn Asp Asp
178 130 135 140
180 gtc aaa gac gcc ggc aac aac ggc atc gaa acc aag cac ctg ccg tca 480
181 Val Lys Asp Ala Gly Asn Asn Gly Ile Glu Thr Lys His Leu Pro Ser
182 145 150 155 160
184 acc tgc cgc gat acg tca tct gat gcc aaa 510
185 Thr Cys Arg Asp Thr Ser Ser Asp Ala Lys
186 165 170
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189 <210> SEQ ID NO: 4

190 <211> LENGTH: 170

191 <212> TYPE: PRT

192 <213> ORGANISM: Artificial Sequence

--> 194 <220> FEATURE:

--> 194 <223> OTHER INFORMATION:

194 <400> SEQUENCE: 4

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195 Met Glu Ala Ile Gln Lys Gly Phe Thr Leu Ile Glu Leu Met Ile Val
196 1 5 10 15
198 Ile Ala Ile Val Gly Ile Leu Ala Ala Val Ala Leu Pro Ala Tyr Gln
199 20 25 30
201 Asp Tyr Thr Ala Arg Ala Gln Met Ser Glu Ala Leu Thr Leu Ala Glu
202 35 40 45
204 Gly Gln Lys Ser Ala Val Ile Glu Tyr Tyr Ser Asp Asn Gly Thr Phe
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/674,368A

DATE: 02/06/2002
TIME: 14:15:57

Input Set : A:\33377PCT.APP.txt
Output Set: N:\CRF3\02062002\I674368A.raw

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205      50      55      60
207 Pro Asn Ser Asn Thr Ser Ala Gly Ile Ala Ala Ser Asn Glu Ile Lys
208 65      70      75      80
210 Gly Lys Tyr Val Ala Ser Val Lys Val Glu Gly Asn Ala Ser Val Ala
211      85      90      95
213 Ser Ile Thr Ala Thr Met Asn Ser Ser Asn Val Asn Lys Asp Ile Lys
214      100      105      110
216 Gly Lys Thr Leu Val Leu Val Gly Lys Gln Asn Ser Gly Ser Val Lys
217      115      120      125
219 Trp Phe Cys Gly Gln Pro Val Thr Arg Asp Asn Ala Asp Asn Asp Asp
220      130      135      140
222 Val Lys Asp Ala Gly Asn Asn Gly Ile Glu Thr Lys His Leu Pro Ser
223 145      150      155      160
225 Thr Cys Arg Asp Thr Ser Ser Asp Ala Lys
226      165      170
230 <210> SEQ ID NO: 5
231 <211> LENGTH: 30
232 <212> TYPE: DNA
233 <213> ORGANISM: Neisseria gonorrhoeae
235 <400> SEQUENCE: 5
236 cccgcgcgcca tggataccct tcaaaaaggc 30
239 <210> SEQ ID NO: 6
240 <211> LENGTH: 30
241 <212> TYPE: DNA
242 <213> ORGANISM: Neisseria gonorrhoeae
244 <400> SEQUENCE: 6
245 gggcctggat ccgtgggaaa tcaacttacg 30
248 <210> SEQ ID NO: 7
249 <211> LENGTH: 29
250 <212> TYPE: DNA
251 <213> ORGANISM: Neisseria gonorrhoeae
253 <400> SEQUENCE: 7
254 ggctctagac tgtcagacca agtttactc 29
256 <210> SEQ ID NO: 8
257 <211> LENGTH: 27
258 <212> TYPE: DNA
259 <213> ORGANISM: Neisseria gonorrhoeae
261 <400> SEQUENCE: 8
262 ggctctagat tgaagcattt atcaggg 27
264 <210> SEQ ID NO: 9
265 <211> LENGTH: 28
266 <212> TYPE: DNA
267 <213> ORGANISM: Neisseria gonorrhoeae
269 <400> SEQUENCE: 9
270 ggctctagat aaacagtaat acaagggg 28
272 <210> SEQ ID NO: 10
273 <211> LENGTH: 28
274 <212> TYPE: DNA
275 <213> ORGANISM: Neisseria gonorrhoeae
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Input : A:\33377PCT.APP.txt
 Output : N:\CRF3\02062002\I674368A.htm

277	<400> SEQUENCE: 10	
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281	<210> SEQ ID NO: 11	
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283	<212> TYPE: DNA	
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287	<400> SEQUENCE: 11	
288	ccccgcgcca tggacaccct tcaaaaaggt tttacc	36
290	<210> SEQ ID NO: 12	
291	<211> LENGTH: 39	
292	<212> TYPE: DNA	
293	<213> ORGANISM: Neisseria Meningitidis Class I	
295	<400> SEQUENCE: 12	
296	gggcctggat ccgagtggcc gtggaaaatc acttaccgc	39
298	<210> SEQ ID NO: 13	
299	<211> LENGTH: 31	
300	<212> TYPE: DNA	
302	<213> ORGANISM: Neisseria Meningitidis Class I	
304	<400> SEQUENCE: 13	
305	ccggcgcgtc tctcacggcg aatggcccgg c	31
307	<210> SEQ ID NO: 14	
308	<211> LENGTH: 39	
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330	gccgcgcgtc tcccgtgatt caggtaatac tcgg	34
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333	<211> LENGTH: 25	
334	<212> TYPE: DNA	
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337	<400> SEQUENCE: 17	
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345	<212> TYPE: DNA	
346	<213> ORGANISM: Neisseria Meningitidis Class I	
348	<400> SEQUENCE: 18	

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/674,368A

DATE: 02/06/2002

TIME: 14:15:59

Input Set : A:\33377PCT.APP.txt

Output Set: N:\CRF3\02062002\I674368A.raw

13 M:270 C: Current Application Number differs, Replaced Application Number
14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
60 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
64 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
68 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
72 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
76 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
80 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
87 M:258 W: Mandatory Feature missing, <220> FEATURE:
87 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
194 M:258 W: Mandatory Feature missing, <220> FEATURE:
194 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:

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